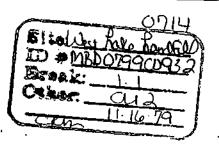


MISSOURI DEPARTMENT OF NATURAL RESOURCES P.O. Box 1368 2010 Missouri Blvd. Jefferson City, Missouri 65102 (314) 751-3241

LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

SAMPLE NO. 79-2642



Reported to Robert Robinson, Director Date 11-16-79

Affiliation Solid Waste Management Program

Sample Description West Lake Landfill - Test Well #38

Collected by Keith Schardein, Supervisor Date 6-14-79 1130

Affiliation Water Quality Monitoring Section - Lab Services

Note: 1. Sample collected with metal sampler with lead weight.

Remarks 2. Well not bailed prior to sampling.

•		j	<b>.</b>
PARAMETER	RESULTS	<u>urits</u>	REMARKS
BOD <sub>5</sub>	<b>∢</b> 2	mg/1	
COD	93	mg/1	
Suspended Solids (NFS)	88	mg/1	
NH3 as N	<0.1	mg/1	
NO3+NO2 as N	₹0.1	mg/1	
Total P	€0.02	mg/1	
TDS	574	mg/l	
TOC	35	mg/1	•
CN-, Total	40.02	mg/1	distilled 6-15-79.
•	-	1	analyzed 9-12-79
рH	7.5	Units	field
Specific Cond.	1010	maho/cm	field
•		29° C	•
Total Alkalinity	322	mg/l	field
Fluoride	0.07	mg/1	
Chloride '	54	mg/l	
Sulfate	136	mg/1	
Total Hardness	520	mg/1	
Total Sulfide	40.1	mg/1	•
Cadmium, dissolved	<b>41</b>	ug/1	•
Chromium, dissolved	2	ug/1	
Copper, dissolved	1	ug/1	,
Iron, dissolved	140	ug/l	<del></del>
Lead, dissolved	4	ug/1/	
Manganese, dissolved	620	ug/l	40241319
Mercury, dissolved	.4	ug/l	6 YO TAKUL BYRKU BARNIR NIRIN BURUK HARRU NINGA HARIF SAHA MARI
Nickel, dissolved	<b>4</b> 10	ug/l	T AANIH ATIKU AKUU LIELE TURDI TIELU III AT TADA TATI LEE
Zinc, dissolved	560	ug/l	#45(   153   910) 9 JUNE    1860    1860    1860    1860    1860    1860    1860    1860    1860    1860
Potassium, dissolved	38.0	mg/1	SUPERFUND RECORDS
Sodium, dissolved	7.54	'mg/1	
Calcium, dissolved	97.8	mg/l	
Magnesium, dissolved	42.8	mg/l	•
Arsenic, dissolved	<b>4</b>	ug/l	
Silver, dissolved	41	ug/l	

Joseph P. Teasdale Governor Fred A. Latser Director

Division of Environmental Quality

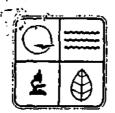
James P. Odendahl Director

DNR 0137

Page Two Robert Robinson, Director Solid Waste Management Program Sample No. 79-2642 November 16, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of Standard Methods for the Examination of Water and Wastewater, EPA manual of Methods for Chemical Analysis of Water and Wastes, and/or Annual Book of ASTM Standards.

James H. Long, Director Laboratory Services Program Division of Environmental Quality



#### LABORATORY SERVICES PROGRAM . REPORT OF SAMPLE ANALYSIS

	Reported to Robert Root	nson, Directo		Pare	<u> 1-10-79</u>	
	Affiliation Solid Waste	Management Pr	cogram	·		<del></del>
(O =	Sample Description West	Lake Landfill	- Test Well #	39		
CES 1-3241	Collected by <u>Keith Scha</u>	rdein. Superv	isor	Date	6-14-79	1040
Οï	Affiliation Water Ouali	ty Monitoring	Section - Ish	Service		
$\simeq$ $\approx$	Note: 1. Samp	le collected	vith metal sam	oler wit	h lead w	eicht.
$\supset \frac{1}{2}$	Remarks 2. Well	le collected on not bailed p	tior to sampli	ng.		
$\bigcup_{\Delta}$		•				٠.
NATURAL RESOUR( City, Missouri 65102 (314) 751	PARAMETER	RESULTS	UNITS	REMA	RKS.	•
22 22	BOD5	7	mg/l			
NATURAL RI City, Missouri 65102	COD	8 <b>5</b>	mg/1 mg/1			
7,3	Suspended Solids (NFS)	139	mg/1 mg/1			
₹ï	NH3 as N	0.6	mg/1			
≃ ₹	NO <sub>3</sub> +NO <sub>2</sub> as N	0.1	mg/l			
× ⊆	Total P	<b>₹</b> 0.02	mg/l			
₽≅	TDS	607	mg/1			
∢ :	TOC	33	mg/1			
ラぎ	CN", Total	₹ 0.02	, mg/1.	dist	illed 6-	15-79
		<b>\</b>	Stands and the		yzed 9-1	
ليات	нф	7.4	Units	fiel	•	. •
	Specific Cond.	1000	munho/cm	fiel		
T OF Jefferson	•		25° C			
DEPARTMENT	Total Alkalinity	236	mg/1	fiel	d	
<b>Z</b> .	Fluoride	0.06	mg/l	,		
ற் த	Chloride.	63	mg/1			
<b>5</b> á	Sulfate	184	mg/l			
<b>£</b> =	Total Hardness	. 480	mg/1			•
<b>~</b> ₫	Total Sulfide	<b>∠0.1</b>	mg/1			•
<b>⋥</b> ፮	Cadmium, dissolved	٧1	ug/1		•	
⊁Σ	Chromium, dissolved	42	ug/l			
ᇤ	Copper, dissolved	14	ug/1			
へ。	Iron, dissolved	<b>4</b> 20	ug/1			
~ ~	Lead, dissolved	4	ug/l			
≂	Manganese, dissolved	400	ug/l			
≒	Mercury, dissolved	<.1	ug/l			
	Nickel, dissolved	30	ug/1			
O=	Zinc, dissolved	21	mg/l			
Š Š	Potassium, dissolved	8.12	mg/1			
യ ജ	Sodium, dissolved	35.2	mg/l			
MISSOUI P.O. Box 1368	Calcium, dissolved	83.2	mg/1			
<u>~</u> ~	Magnesium, dissolved	44.9	mg/l		-	
	Arsenic, dissolved	<b>&lt;</b> 4	ug/1			
	Silver, dissolved	<b>〈</b> 1	ug/l			

Joseph P. Teasdale Governor Fred A. Laiser Director

Page Two Robert Robinson, Director Solid Waste Management Program Sample No. 79-2641 November 16, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of Standard Methods for the Examination of Water and Wastewater, EPA manual of Methods for Chemical Analysis of Water and Wastes, and/or Annual Book of ASTM Standards.

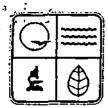
James H. Long, Director

Laboratory Services Program

Division of Environmental Quality

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DEPARTMENT OF NATURAL RESOURCES 2010 Missouri Blvd. Jefferson City, Missouri 65102 (314) 751-3241

## LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

SAMPLE NO. 79-2640

Reported to	Robert Robinson, Director	Date _	11-16-79	
Affiliation	Solid Waste Management Program	· ·		
Sample Descr	iption West Lake Landfill Test Wall	#36		
Collected by	Keith Schardein, Supervisor	Date _	6-14-79 0915	
Affillation	Water Quality Monitoring Section -	Lab Servi	ces	
Remarks Not	e: 1. Sample collected with metal 2. Well not bailed prior to sa	sampler w	ith lead weight.	

PARAMETER	RESULTS	UNITS	REMARKS
BOD <sub>5</sub>	55	mg/1	
COD	125	mg/l	
Suspended Solids (NFS)	372	mg/l	
NH3 as N	0.5	mg/1"	•
NO3+NO2 as N	0.2	mg/1	
Total P	0.06	mg/l	
TDS .	660	mg/l	
TOC	54	mg/l	
pН	7.1 ·	Units	field
Specific Cond.	1200	mml10/cm	field
•		25° C	
Total Alkalinity	628	mg/l	field
Fluoride	0.04	mg/l	
Chloride	29	mg/l	
Sulfate .	43	mg/l	•
Total Hardness	600	mg/l	
Total Sulfide	<0.1	mg/1	•
CN <sup>-</sup> , Total	<b>49.</b> 02	mg/l	distilled 6-15-79
-			analyzed 9-12-79
Cadmium, dissolved	<1	ug/l	
Chromium, dissolved	2	ug/1 .	
Copper, dissolved	2	ug/l	
Iron, dissolved	17.2	mg/l	• • •
Lead, dissolved	5	ug/l	
Manganese, dissolved	2000	ug/l	
Mercury, dissolved	.5	ug/l	
Nickel, dissolved	< 10	ug/1	
Zinc, dissolved	· 590	ug/l	
Potassium, dissolved	2.08	mg/1	•
Sodium, dissolved	29.6	mg/l	
Calcium, dissolved	156	mg/1	
Magnesium, dissolved	40.0	mg/l	
Arsenic, dissolved	' 31	ug/1	•
Silver, dissolved	<1	ug/l	•

Joseph P. Teasdale Governor Fred A. Lafser Director

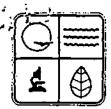
Page Two Robert Robinson, Director Solid Waste Management Program Sample No. 79-2640 November 16, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of Standard Methods for the Examination of Water and Wastewater, EPA manual of Methods for Chemical Analysis of Water and Wastes, and/or Annual Book of ASTM Standards.

James H. Long, Birector

Laboratory Services Program

Division of Environmental Quality



# LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

Reported to Robert Robinson, Director	Date	11-15-79	
Affiliation <u>Solid Waste Management Program</u>			·
Sample Description <u>West Lake Landfill - Test Well</u>	#37		
Collected by <u>Keith Schardein, Supervisor</u>	Date	6-14-79	0820
Affiliation Water Quality Monitoring Section - La	Servi	ces	
Affiliation <u>Water Quality Monitoring Section - Lal</u> Note: 1. Sample collected with metal sam Remarks 2. Well not bailed prior to sample	ing.	vith lead w	eight.

PARAMETER	RESULTS	UNITS	REMARKS
COD	22	mg/l	
NH3 as N	<b>≼0.1</b>	mg/l	
NO3+NO2 as N	0.5	mg/l	
Total P	0.07	mg/l	
TDS	-	- <b>-</b>	no sample
TOC	28	mg/l	_
pН	7.4	Units	field
Specific Cond.	1680	mmho/cm 25° C	field
Total Alkalinity	540 ·	mg/l	field
Fluoride	0.05	mg/l	
Chloride	13	mg/1	
Sulfate	415	mg/1	
Total Hardness	960	mg/l	,
Cadmium, dissolved	41	ug/l	
Chromium, dissolved	< 2 .	ug/1	•
Copper, dissolved	15	ug/l	,
Iron, dissolved	< 20	ug/1	
Lead, dissolved	4	ug/l	•
Manganese, dissolved	300	ug/1 .	
Nickel, dissolved	<10	ug/1	
Zinc, dissolved	1020	ug/l	
Potassium, dissolved	4.09	mg/l	
Sodium, dissolved	6.32	mg/l	
Calcium, dissolved	258	mg/l	
Magnesium, dissolved	71.2	mg/l	
Arsenic, dissolved	<b>∢</b> 4	ug/l	
Silver, dissolved	<b>&lt;</b> 1	ug/l	

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Joseph P. Teasdale Governor Fred A. Lafser Director

Robert Robinson, Director Solid Waste Management Program Sample No. 79-2639 November 15, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of Standard Methods for the Examination of Water and Wastewater, EPA manual of Methods for Chemical Analysis of Water and Wastes, and/or Annual Book of ASTM Standards.

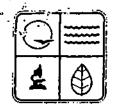
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James H. Long, Director
Laboratory Services Program
Division of Environmental Quality

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## LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

Reported to Robert Robinson, Director	Date	11-15-79
Affiliation Solid Waste Management Program	•	
Sample Description West Lake Landfill - Test Well	#37A	
Collected by Keith Schardein, Supervisor	Date	6-13-79 1545
Affiliation Water Quality Monitoring Section - La	ab Ser	vices
Remarks Note: 1. Sample collected with metal sa	ampler	with lead weight.

PARAMETER	RESULTS	UNITS	<u>REMARKS</u>
BODs	3	mg/l	
COD	58	mg/1	
Suspended Solids (NFS)	374	mg/1	
NH3 as N	0.2	mg/l	
NO3+NO2 as N	0.1	mg/l	
Total P	<b>∢0.02</b>	mg/l	
TDS	474	mg/l	
TOC	26	mg/l	
CN-, Total	<0.02	mg/1	distilled 6-14-79
•	•	J.	analyzed 9-12-79
plł	7.5	Units	field
Specific Cond.	840	mmho/cm	field
•		25° C	
Total Alkalinity	268	mg/l	field
Fluoride	0.06	mg/l	
Chloride	73	mg/l	
Sulfate	66	mg/l	
Total Hardness	360	mg/1	
Total Sulfide	<0.1	mg/1	
Cadmium, dissolved	<b>4</b> 1	ug/l	•
Chromium, dissolved	6	ug/l	
Copper, dissolved	8	ug/l	
Iron, dissolved	€20	ug/l	•
Lead, dissolved	6	ug/l	
Manganese, dissolved	1490	ug/l	
Mercury, dissolved	.2	ug/l	
Nickel, dissolved	<b>∢</b> 10	ug/l	
Zinc, dissolved	30	mg/l	
Potassium, dissolved	5.50	mg/1	
Sodium, dissolved	29.2	mg/1	, .
Calcium, dissolved	84.5	mg/l	•
Magnesium, dissolved	23.5	mg/1	,
Arsenic, dissolved	44	ug/l	•
Silver, dissolved	۷1	ug/l	

Joseph P. Teasdale Governor Fred A. Lafser Director

Page Two Robert Robinson, Director Solid Waste Management Program Sample No. 79-2638 November 15, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of <u>Standard Methods for the Examination of Water and Wastewater</u>, EPA manual of <u>Methods for Chemical Analysis of Water and Wastes</u>, and/or <u>Annual Book of ASTM Standards</u>.

James H. Long, Director

Laboratory Services Program

Division of Environmental Quality



MISSOURI DEPARTMENT OF NATURAL RESOURCES P.O. Box 1368 2010 Missouri Blvd. Jefferson City, Missouri 65102 (314) 751-3241

## LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

SAMPLE NO. 79-2637

Reported to _	Robert Robinson, Director	Date	11-15-79
Affiliation _	Solid Waste Management Program	· · ·	<del></del>
Sample Descri	ption West Lake Landfill - Test Wel	1 #35	
Collected by	Keith Schardein, Supervisor	Date	6-13-79 1500
Affiliation <u>N</u>	later Quality Monitoring Section - I	ab Servi	ices
Remarks	<ol> <li>Sample collected with metal s</li> <li>Well not bailed.</li> </ol>	sampler v	with lead weight.

			•, •
PARAMETER	RESULTS	UNITS	REMARKS
BOD <sub>5</sub>	5	mg/l	
COD	122	mg/l	
Suspended Solids (NFS)	119	mg/1	
NH3 as N	0.2	mg/l .	
NO3+NO2 as N	0.1	mg/1	
Total P	0.06	mg/l	
TDS	571	mg/1	
TOC	35	mg/l ,	
CN-, Total	<b>&lt;</b> 0.02	mg/l	distilled 6-14-79
-	•		analyzed 9-12-79
рH	7.4	Units	field
Specific Cond.	890	mmho/em	field
	•	25° C	
Total Alkalinity	234	mg/1	field
Fluoride	0.04	mg/1	
Chloride	96	mg/1	•
Sulfate	126	mg/l	•.
Total Hardness	500	mg/1	•
Total Sulfide	<0.1	mg/l	
Cadmium, dissolved .	1	ug/l	•
Chromium, dissolved	2	ug/l	
Copper, dissolved	5	ug/l	
Iron, dissolved	57	ug/1	
Lead, dissolved	4	ug/l	
Manganese, dissolved	1730	ug/1	
Mercury, dissolved	<.1	ug/l	
Nickel, dissolved	24	ug/l	
Zinc, dissolved	17	mg/l	•
Potassium, dissolved	7.35	mg/l	
Sodium, dissolved	39,3	mg/1	
Calcium, dissolved	85.1	mg/l	
Magnesium, dissolved	32.0	mg/1	•
Arsenic, dissolved	< 4	ug/l	•
Silver, dissolved	<b>41</b>	ug/l	

Joseph P. Teasdale Governor Fred A. Lafser Director

1..ge Two
Robert Robinson, Director
Solid Waste Management Program
Sample No. 79-2637
November 15, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of <u>Standard Methods for the Examination of Water and Wastewater</u>, EPA manual of <u>Methods for Chemical Analysis of Water and Wastes</u>, and/or <u>Annual Book of ASTM Standards</u>.

James H. Long, Director

Laboratory Services Program

Division of Environmental Quality



# LABORATORY SERVICES PROGRAM. REPORT OF SAMPLE ANALYSIS

SAMPLE NO.

79-2636

	Reported to Rob	ert Robinson	Directo	or	Date	11-15-79	
	Affiliation Sol	id Waste Man	agement l	Program			
(0.5	Sample Description	n West Lake	Landfill	l - Test Well	#34		
₩. 25 .	Collected by Kei	th Schardein	Supervi	isor	Date	6-13-79	1330
Οž	Affiliation Wat	er Quality M	onitoring	g Section			
$\overline{\mathbf{c}}$ $\epsilon$	Note: Remarks	1. Sample c	ollected	with metal sa	ampler	with lead	weight.
$\preceq$				<del></del>			
DEPARTMENT OF NATURAL RESOURCES 2010 Missouri Blvd. Jefferson City. Missouri 65102 (314) 751-3241	DADAMETED	DEC	TIL TO	· IBITOC		PMA DVC	•, •
<u>ٽ</u> ٽ ۾	PARAMETER	KES	ULTS	<u>UNITS</u>	<u> </u>	<u>EMARKS</u>	
≃8	BOD <sub>5</sub>		13	mg/l			
I	COD		129	mg/l			
₹ 3	Suspended Solids		122	mg/1			
⋧⋾	NH3 as N		년. 2 0. 3	mg/1			
<b>≒</b> 8	NO3+NO <sub>2</sub> as N Total P		.02	mg/l			
二点	TDS	•	417	mg/l mg/l			
4	TOC	'	31	mg/1 mg/l			
<b>→</b> 🖹	CNT, Total		.02	mg/l	44.	stilled 6-1	4-79
<b>~</b> 0	,	**	· [ ·	₩ <b>Ģ</b> / ± . ;		alyzed 9-12	
ᄔ	рН		7.4	Units		21d	-,,
$\bigcirc$ $\stackrel{\circ}{\mathbb{E}}$	Specific Cond.		740	mmho/cm		eld	
<b>○</b> §	•			· 25° C			
<u> 는</u> 왕	Total Alkalinity	:	220	mg/l	fie	eld	
<b>Z</b> .	Fluoride		.05	mg/1			
ill g	Chloride		67	mg/1		* * * * * * * * * * * * * * * * * * * *	
<b>5</b> á	Sulfate		70	mg/l			,
<u>←</u> ⊑	Total Hardness		3 <b>4</b> 0	mg/l			
~ §	Total Sulfide		)¦ 1	mg/l			
<b>₩</b>	Cadmium, dissolve		∢1	ug/1		•	
. ≥	Chromium, dissolu		< 2 2	ug/l	•		
出り	Copper, dissolved		3	ug/1			
$\triangle$	Iron, dissolved	4	, 10   -	ug/l			٠
	Lead, dissolved		5	ug/l			
≂	Manganese, dissol		590	ug/l			
<b>5</b> %	Mercury, dissolve		د <u>ا</u> 1	ug/l			
$\preceq_{\aleph}$	Nickel, dissolved	•	10 21	ug/1	·	•	
SSOU Box 1368	Zinc, dissolved Potassium, dissol	wad 5	. 76	mg/1			
တ္က စွဲ	Sodium, dissolved		116	mg/l			
MISSOURI P.O. Box 1368	Calcium, dissolve		14	mg/l mg/l		•	
<b>Š</b> 0.	Magnesium, dissolve		ilo	mg/l			
u	Arsenic, dissolve		44	ug/1			
	Silver, dissolved		di	ug/1			
	,		~ -				

Joseph P. Teasdale Governor Fred A. Lafser Director

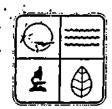
Page Two Robert Robinson, Director Solid Waste Management Program Sample No. 79-2636 November 15, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of <u>Standard Methods for the Examination of Water and Wastewater</u>, EPA manual of <u>Methods for Chemical Analysis of Water and Wastes</u>, and/or <u>Annual Book of ASTM Standards</u>.

James H. Long, Director

Laboratory Services Program

Division of Environmental Quality



**DEPARTMENT OF NATURAL RESOUR** 

2010 Missouri Blvd.

### LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

SAMPLE NO.

79-2635

Reported to Robert Robinson, Director 11-15-79 Date Affiliation Solid Waste Management Program Sample Description West Lake Landfill - Test Well #40 Supervisor 6-13-79 Collected by Keith Schardein, 1115 Water Quality Monitoring Section - Lab Services

1. Sample collected with metal sampler with lead weight

2. Well not bailed completely Affiliation Note: Remarks RESULTS PARAMETER UNITS REMARKS 3 BODs mg/1COD <u>19</u> mg/1123 Suspended Solids (NFS) mg/1**∢**0!1 NH3 as N mg/10!3 mg/1NO3+NO2 as N **∢**0.02 mg/1Total P 833 mg/I TDS Ż0 TOC mg/1**∢**0.02 CN-, Total .mg/15 = distilled 6-14-79 analyzed 9-12-79 7.4 Units field Specific Cond. 1400 mmlro/cm field 25° C Total Alkalinity 550 mg/l field Fluoride 0.02 mg/l Chloride 60 mg/l Sulfate 136 mg/l Total Hardness 720 mg/1Total Sulfide (O!1 mg/1Cadmium, dissolved б ug/l Chromium, dissolved 2 ug/1 7 Copper, dissolved ug/l 20 Iron, dissolved ug/l Lead, dissolved ug/1 Manganese, dissolved ug/l Mercury, dissolved ug/1 0 Nickel, dissolved ug/1 18 Zinc, dissolved mg/1mg/1Potassium, dissolved 31 .7 mg/1Sodium, dissolved

1,72

44.

Joseph P. Teasdale Governor Fred A. Laiser Director

Calcium, dissolved

Arsenic, dissolved

Silver, dissolved

Magnesium, dissolved

Division of Environmental Quality

James P. Odendahl Director

mg/1

mg/1

ug/l ug/l

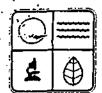
Page Two Robert Robinson, Director Solid Waste Management Program Sample No. 79-2635 November 15, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of Standard Methods for the Examination of Water and Wastewater, EPA manual of Methods for Chemical Analysis of Water and Wastes, and/or Annual Book of ASTM Standards.

James H. Long, Birector

Laboratory Services Program

Division of Environmental Quality



### LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

SAMPLE NO.

79-2634

Affiliation		Reported to Robert Ro	binson, Directo	or D	ate	11-13-79	
Collected by Keith Schardein, Supervisor Date 6-13-79  Affiliation Water Quality Monitoring Section - Lab Services  Remarks Note: Sample collected with metal sampler with lead weight  PARAMETER RESULTS UNITS REMARKS  BODS 3 mg/1  COD 23 mg/1  Suspended Solids (NFS) 153 mg/1  NH3 as N <0.1 mg/1  NH3 as N <0.1 mg/1  Total P <0.02 mg/1  TOS 2200 mg/1  TOS 2200 mg/1  CN-, Total <0.02 mg/1 distilled 6-14-analyzed 9-12-7  Filloride 0.03 mg/1  Specific Cond. 3000 immho/cm field  Specific Cond. 3000 immho/cm field  Fluoride 0.03 mg/1  Chloride 2262 mg/1  Sulfate 690 mg/1  Total Alkalinity 698 mg/1 field  Fluoride 0.03 mg/1  Colloride 2262 mg/1  Colloride 2262 mg/1  Colloride 246 mg/1  Copper, dissolved 4 ug/1  Copper, dissolved 5 ug/1  Copper, dissolved 6 ug/1  Manganese, dissolved 1 ug/1  Manganese, dissolved 0.2 ug/1  Nickel, dissolved 0.2 ug/1  Nickel, dissolved 0.2 ug/1  Nickel, dissolved 0.2 ug/1  Zinc, dissolved 1 ug/1  Nickel, dissolved 1 ug/1  Nickel, dissolved 0.2 ug/1  Zinc, dissolved 1.0 mg/1  Sodium, dissolved 1.0 mg/1  Calcium, dissolved 1.0 mg/1  Calcium, dissolved 1.0 mg/1  Manganesium, dissolved 1.0 mg/1  Magnesium, disso		Affiliation Solid Was	te Management I	rogram			
Arsenic, dissolved 5 ug/1	<b>.</b> 0-	Sample Description Wes	t Lake Landfill	- Test Well #	41		
Arsenic, dissolved 5 ug/1	Μ̈́Ž	Collected by Keith Sch	ardein, Supervi	lsor D	ate	6-13-79	0900
Arsenic, dissolved 5 ug/1	$O_{\frac{7}{2}}$	Affiliation Water Qua	lity Monitoring	Section - Lab	Servi	ces	
Arsenic, dissolved 5 ug/1	<del>\</del> \( \tilde{\	Remarks Note: Sample of	collected with m	netal sampler w	ith le	ad weight	
Arsenic, dissolved 5 ug/1	ス₫						
Arsenic, dissolved 5 ug/1	တ္တ	PARAMETER	PESITTS	271/01	REM	ARKS	
Arsenic, dissolved 5 ug/1	۾ پي	<del></del>	<del></del> -		<u> KLIKE</u>	inuto	
Arsenic, dissolved 5 ug/1	ϛ						
Arsenic, dissolved 5 ug/1	—¹ ন্ত		l l				
Arsenic, dissolved 5 ug/1	<b>₹</b> :			<del>-</del>			
Arsenic, dissolved 5 ug/1	<b>⋧</b> ⋾			<del>-</del>			
Arsenic, dissolved 5 ug/1	<b>≒</b> %		7				
Arsenic, dissolved 5 ug/1	ΪË						
Arsenic, dissolved 5 ug/1	∢ .			a contract of the contract of			
Arsenic, dissolved 5 ug/1	ラぎ	CN-, Total	< 0.02	mg/1			
Arsenic, dissolved 5 ug/1	5		J,	4			79
Arsenic, dissolved 5 ug/1	产品	•	T ·			_	
Arsenic, dissolved 5 ug/1	Oğ	Specific Cond.	3000		rier	1	
Arsenic, dissolved 5 ug/1	ه ا	Total Albertades	400		fial.		
Arsenic, dissolved 5 ug/1	<del></del>				rier	4	
Arsenic, dissolved 5 ug/1	<del>-</del> 6						
Arsenic, dissolved 5 ug/1	₩ .					•	-
Arsenic, dissolved 5 ug/1	2 =				•		**
Arsenic, dissolved 5 ug/1	<u></u>						
Arsenic, dissolved 5 ug/1	<u>∽</u> %						
Arsenic, dissolved 5 ug/1	₹₹						
Arsenic, dissolved 5 ug/1	م بھ		47				
Arsenic, dissolved 5 ug/1	<b>兴</b> 万		< 20	<del>-</del> .			
Arsenic, dissolved 5 ug/1	$\square  pprox$	Lead, dissolved	6				
Arsenic, dissolved 5 ug/1	<del></del> :	Manganese, dissolved		u <b>g/</b> 1			
Arsenic, dissolved 5 ug/1	⊆ 。	Mercury, dissolved		ug/l			
Arsenic, dissolved 5 ug/1	ڪ ڇ		i i				
Arsenic, dissolved 5 ug/1	$O^{\omega}$		Γ'				
Arsenic, dissolved 5 ug/1	ώş						
Arsenic, dissolved 5 ug/1	$\overline{\mathbf{N}}$ $\mathbf{q}$			<del>-</del> .			
Arsenic, dissolved 5 ug/1	<b>5</b> 0						
	نہ کے			- ·			
211/c1, 0122071/c0 ~ 1 m8/ r	•						
Ι '		erivet, dissorved	~  <del>*</del> .	ug/ I			

Joseph P. Teasdale Governor Fred A. Lafser Director

t ge Two Robert Robinson, Director Solid Waste Management Program Sample No. 79-2634 November 13, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of <u>Standard Methods for the Examination of Water and Wastewater</u>, EPA manual of <u>Methods for Chemical Analysis of Water and Wastes</u>, and/or <u>Annual Book of ASTM Standards</u>.

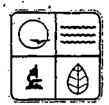
James H. Long, Director

Laboratory Services Program
Division of Environmental Quality

JHL/1h



WASTE MANAGEMENT PROGRAM



DEPARTMENT OF NATURAL RESOUR 2010 Missouri 65102 (314) 751

# LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

NOV 1 5 1979

SAMPLE NO.

79-2634

ortin WASTE MARBORA TI ....

Date 11-13-79 Reported to Robert Robinson, Director Affiliation \_\_Solid Waste Management Program Sample Description West Lake Landfill - Test Well #41 Collected by Keith Schardein, Supervisor 6-13-79 Date 0900 Affiliation Water Quality Monitoring Section - Lab Services Remarks Note: Sample collected with metal sampler with lead weight

	1 1/		·
<u>PARAMETER</u>	RESULTS	UNITS	REMARKS
BOD <sub>5</sub>	3	mg/l	
COD	23	mg/1	•
Suspended Solids (NFS)	153	` mg/1	
NH3 as N	< 0. <sup>1</sup> 1	mg/1	
NO3+NO2 as N	1. 7 /	mg/1	
Total P	< 0.Q2 /	mg/L	-
TDS	2200	mg/1	
TOC	1 6	mg/l	
CN-, Total	< 0.02	mg/1	distilled 6-14-79
			analyzed 9-12-79
pH	7.4	Units	field
Specific Cond.	3000	inmho/cm	field
•	ļ	25° C	
Total Alkalinity	698	mg/1	field
Fluoride	0.03	mg/l	
Chloride	262	mg/1	
Sulfate	690	mg/l	٠.
Total Hardness	1540	. mg/1	
Total Sulfide	< 0.1	mg/l	
Cadium, dissolved	4	ug/1	•
Chromium, dissolved	5	ug/1	
Copper, dissolved	47	ug/1	
Iron, dissolved	< 20	ug/l	
Lead, dissolved	·  6	ug/1	
Manganese, dissolved	1.1	ug/l	
Mercury, dissolved	0 ]2	ug/l	
Nickel, dissolved	32	ug/l	
Zinc, dissolved	1 6	mg/1	
Potassium, dissolved	8.07	mg/l	
Sodium, dissolved	110	mg/l	
Calcium, dissolved	426	mg/1	•
Magnesium, dissolved	96.4	mg/l	
Arsenic, dissolved	5	ug/1	
Silver, dissolved	<b>∠</b>  1	ug/1	

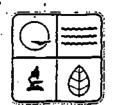
Joseph P. Teasdale Governor Fred A. Latser Director

Page Two Robert Robinson, Director Solid Waste Management Program Sample No. 79-2634 November 13, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of <u>Standard Methods for the Examination of Water and Wastewater</u>, EPA manual of <u>Methods for Chemical Analysis of Water and Wastes</u>, and/or <u>Annual Book of ASTM Standards</u>.

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James H. Long, Director Laboratory Services Program Division of Environmental Quality



### LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

SAMPLE NO.

79-2641

NOV 1 9 1979

	Reported to Robert Rob	inson.	Director	••	Dale	<u> 14-16-79</u>	
	Affiliation Solid Wast			i.	The state of the state of	I PROGRAM	
					#20	<del></del>	-
SS <u>₹</u>	Sample Description West					<del></del> -	
<b>光</b> 8	Collected by <u>Keith Sch</u>	ardein	Supervisor	· · · · · · · · · · · · · · · · · · ·	Date _	6-14-79	1040
$\sum_{i \in I} di$	Affiliation Water Oual	ity Mo	nitoring Sec	<u>tion - La</u>	b Servic	es	
<b>₩</b>	Remarks Note: 1. Sam	ple co	llected with bailed prior	metal sa	mpler wi	th lead we	ight.
DEPARTMENT OF NATURAL RESOURCES 2010 Missouri 65102 (314) 751-3241				<u>.tu Jamez</u>			
QE			$-(X_{-})$			•	
က္က °	PARAMETER	RES	ULTS	<u>UNITS</u>	REN	<u>iarks</u> .	
<u>공</u> 2	BOD5		7	mg/1			
≅	COD		85	mg/1			
<b>1</b> 651	Suspended Solids (NFS)		139	mg/l			
NATURA City, Missouri	NH3 as N		0.6	mg/l			
ı≟ ğ	$NO_3+NO_2$ as N		0.1	mg/l			
ے ≋	Total P		.02	mg/l			
<b>∵</b> ?	TDS		507	mg/l			
<b>**</b>	TOC		33	mg/l			
<b>~</b> 0	CNT, Total	<b>∢</b> ○	.02	mg/l		stilled 6-1	
ᄔ	рĦ		7.4	Units		alyzed 9-12 eld	-19
<u></u>	Specific Cond.		000	mmho/em		:10 :1d	
T OF Jefferson	openitie cond.	-		25° C	* 1.		
<u>⊢</u> ≥	Total Alkalinity		236	mg/l	fie	eld	
<b>Z</b> .	Fluoride		.06	mg/1			
ள் த	Chloride	!	63	mg/l			
⋝ë	Sulfate		184	mg/l			٠,
<b>二</b> 语	Total Hardness		480	mg/1			
DEPARTME	Total Sulfide	•	0.1	mg/l			
<b>₹</b>	Cadmium, dissolved		<b>〈</b> 1	ug/l		•	
<b>∂</b> ਨ	Chromium, dissolved		4 2	ug/l	•		
ਛੋਂ≍	Copper, dissolved		14 20	ug/1			
$\square$ $\aleph$	Iron, dissolved Lead, dissolved	•	4	ug/1	•		
_	Manganese, dissolved		400	ug/l ug/l			
$\simeq$	Mercury, dissolved		.1	ug/1			
⊃ જુ	Nickel, dissolved	`	30	ug/l	•		
$O^{2}$	Zinc, dissolved		21 .	mg/1			
MISSOUR! (P.O. Box 1368 2	Potassium, dissolved		12	mg/l			
<u>സ്</u> ജ	Sodium, dissolved	3:	5.2	mg/1			
⋜⊹	Calcium, dissolved		3.2	mg/l			
نه 🚄	Magnesium, dissolved		.9	mg/l			
	Arsenic, dissolved		< 4	ug/l			
	Silver, dissolved		ć I	ue/1			

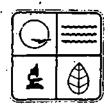
Joseph P. Teasdale Governor Fred A. Lafser Director

Page Two Robert Robinson, Director Solid Waste Management Program Sample No. 79-2641 November 16, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of Standard Methods for the Examination of Water and Wastewater, EPA manual of Methods for Chemical Analysis of Water and Wastes, and/or Annual Book of ASTM Standards.

James H. Long, Director Laboratory Services Program

Division of Environmental Quality



OURI DEPARTMENT OF NATURAL RESOURCES 1368 2010 Missouri Blvd. Jefferson City, Missouri 65102 (314) 751-3241

LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

SAMPLE NO.

79-2642

NOV 1 9 1979

Reported to Robert Robinson, Director Date: 1 19 11/15/179

Affiliation Solid Waste Management Program

Sample Description West Lake Landfill - Test Nell #38

Collected by Keith Schardein, Supervisor Date 6-14-79 1130

Affiliation Water Quality Monitoring Section - Lab Services

Note: 1. Sample collected with metal sampler with lead weight.

Remarks 2. Well not bailed prior to sampling.

Remarks Note: 1. Samp	not bailed pr	ith metal samb ior to samplin	ler with lead weight.	
			. 7:	
PARAMETER	RESULTS	UNITS	REMARKS	
BODs	₹2	mg/l		
COD	93	mg/l	1	
Suspended Solids (NFS)	88	mg/l	<b>\</b> .	
NH3 as N	₹0.1	mg/l	***	
NO3+NO2 as N	₹0.1	mg/l	•	
Total P	<b>∢</b> 0 .02	mg/1		
TDS	<b>574</b>	mg/l		
TOC	35	mg/l		
CN-, Total	4 0 .02	mg/l	distilled 6-15-79 analyzed 9-12-79	
рH	<b>7.</b> 5	Units	field	
Specific Cond.	1010	mmho/cm 25° C	field	
Total Alkalinity	322	mg/l	field	
Fluoride	0,07	mg/1		
Chloride	54	mg/1		
Sulfate	136	mg/l	•	
Total Hardness	\$20	mg/l		
Total Sulfide	<b>4</b> 9.1	mg/1		
Cadmium, dissolved	<b>K</b> 1	ug/1	•	
Chromium, dissolved	2	ug/l		
Copper, dissolved	1	ug/l		
Iron, dissolved	140	ug/l		
Lead, dissolved	4	ug/l		
Manganese, dissolved	620	ug/l		
Mercury, dissolved	].4	ug/l	•	
Nickel, dissolved	€ 10	ug/l		
Zinc, dissolved	\$60	ug/l		
Potassium, dissolved	38.0	mg/l		
Sodium, dissolved	7 54	. mg/1		
Calcium, dissolved	97.8	mg/1		
Magnesium, dissolved	42.8	mg/l		
Arsenic, dissolved	<b>4</b>	ug/l		
Silver, dissolved	<u>k</u> 1	ug/l		

Joseph P. Teasdale Governor Fred A. Latser Director

Page Two
Robert Robinson, Director
Solid Waste Management Program
Sample No. 79-2642
November 16, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of Standard Methods for the Examination of Water and Wastewater, EPA-manual of Methods for Chemical Analysis of Water and Wastes, and/or Annual Book of ASTM Standards.

James H. Long, Director
Laboratory Services Program
Division of Environmental Quality



MISSOURI DEPARTMENT OF NATURAL RESOURCES P.O. Box 1368 2010 Missouri Blvd. Jefferson City, Missouri 65102 (314) 751-3241

#### LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

79-2640 SAMPLE NO.

NOV 2 1 1370

SCLID MASTE

RAMAGENTET PROGRAM
Date 11-16-79 Reported to Robert Robinson, Director

Affiliation Solid Waste Management Program

Sample Description West Lake Landfill Test Well #36

Collected by Keith Schardein, Supervisor Date 6-14-79 0915

Affiliation Water Quality Monitoring Section - Lab Services

Sample collected with metal sampler with lead weight. Well not bailed prior to sampling.

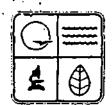
Kemarks	not parted pr	<u>lor to sampiln</u>	<u> </u>
•			*. 1
PARAMETER	RESULTS	UNITS	REMARKS
BOD <sub>5</sub>	55	mg/1	
COD	125	mg/1	
Suspended Solids (NFS)	372	mg/1	
NH3 as N	0.5	mg/l	•
NO3+NO2 as N	. 0.2	μğΝ	
Total P	<b>0.06</b>	/ mg/1	
TDS	660	mg/1 \	
TOC .	54	mg/1	
рH	7.1	Units	field
Specific Cond.	1200	mmho/cm	field
		25° C	
Total Alkalinity .	628	mg/1	field
Fluoride	ο̂.04	mg/l	
Chloride	29	mg/l	
Sulfate	43	mg/1	
Total Hardness	600	mg/1	
Total Sulfide	< 0.1	mg/l	
CN <sup>-</sup> , Total	<b>∢</b> 0.02	mg/l	distilled 6-15-79
	``]	v	analyzed .9-12-79
Cadmium, dissolved	<b>(1</b>	ug/l	•
Chromium, dissolved	2	ug/1	
Copper, dissolved	2	ug/l	
Iron, dissolved	17.2	mg/1 "	• • • • • • • • • • • • • • • • • • • •
Lead, dissolved	5	ug/1	
Manganese, dissolved	2000	ug/l	
Mercury, dissolved	.5	ug/l	•
Nickel, dissolved	₹ 10	. ug/1	
Zinc, dissolved	590	' ug/1	
Potassium, dissolved	2.08	mg/l	
Sodium, dissolved	29.6	mg/1	
Calcium, dissolved	156	mg/l	
Magnesium, dissolved	40.0	mg/1	,
Arsenic, dissolved	31	ug/1	
Silver, dissolved	(1	ug/1	
,	1 -	G0, -	

Joseph P. Teasdale Governor Fred A. Lafser Director

Page Two
Robert Robinson, Director
Solid Waste Management Program
Sample No. 79-2640
November 16, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of Standard Methods for the Examination of Water and Wastewater, EPA manual of Methods for Chemical Analysis of Water and Wastes, and/or Annual Book of ASTM Standards.

James H. Long, Director
Laboratory Services Program
Division of Environmental Quality



MISSOURI DEPARTMENT OF NATURAL RESOURCES P.O. Box 1368 2010 Missouri Blvd. Jefferson City, Missouri 65102 (314) 751-3241

LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

SAMPLE NO.

79-2637



NOV 2 1 1979

Reported to Robert Robinson, Director Date: 1745-79

Affiliation Solid Waste Management Program

Sample Description West Lake Landfill - Test Well #35

Collected by Keith Schardein, Supervisor Date 6-13-79 1500

Affiliation Water Quality Monitoring Section - Lab Services

Note: 1. Sample collected with metal sampler with lead weight.

Remarks 2. Well not bailed.

	\ \ \ \ \ \	\	* ,
PARAMETER	RESULTS	UNITS	REMARKS
BODS	5	mg/1	
COD	122	mg/l	
Suspended Solids (NFS)	119	mg/l	
NH3 as N	0.2	mg/l	
NO3+NO2 as N	0.1	/ mg/l	-
Total P	0.06 🐪 🗸	mg/l	
TDS	571	mg/l	-
TOC	i 35	mg/l	
CN-, Total	<0.02	mg/l	distilled 6-14-79
,	1	Ų.	analyzed 9-12-79
pH	7.4	Units	field
Specific Cond.	890	mmho/cm	field
	1	25° C	
Total Alkalinity	234	mg/l	field
Fluoride	0 ! 04	mg/l	
Chloride	96	mg/l	
Sulfate	<b>ị</b> 26	mg/l	
Total Hardness	<b>\$00</b>	mg/l	
Total Sulfide	<0.1	mg/l	
Cadmium, dissolved	1	ug/l	
Chromium, dissolved	.   2	ug/l	
Copper, dissolved	<b>\</b> 5	ug/l	
Iron, dissolved	57	ug/l	
Lead, dissolved	4	ug/l	
Manganese, dissolved	1730	ug/l	
Mercury, dissolved	<b>€.</b> 1	ug/l	•
Nickel, dissolved	24	ug/l	
Zinc, dissolved	17	mg/l	
Potassium, dissolved	7 . 35	mg/l	
Sodium, dissolved	39.3	mg/l	
Calcium, dissolved	85.1	mg/1	•
Magnesium, dissolved	32.0	mg/1	•
Arsenic, dissolved	< 4	ug/1	,
Silver, dissolved	<b>k</b> 1	ug/l	

Joseph P. Teasdale Governor Fred A. Lafser Director

Page Two
Robert Robinson, Director
Solid Waste Management Program
Sample No. 79-2637
November 15, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of <u>Standard Methods for the Examination of Water and Wastewater</u>, EPA manual of <u>Methods for Chemical Analysis of Water and Wastes</u>, and/or <u>Annual Book of ASTM Standards</u>.

James H. Long, Director
Laboratory Services Program
Division of Environmental Quality



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Jefferson City, Missouri 65102

DEPARTMENT (2010 Missouri Blvd. Jeff

### LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

Bectard

NOV 2

NOV 2 1 1979

Reported to Robert Robinson, Director Date TIPOGRAM

Affiliation Solid Waste Management Program

Sample Description West Lake Landfill - Test Well #34

Collected by Keith Schardein, Supervisor Date 6-13-79 1330

Affiliation Water Quality Monitoring Section

Note: 1. Sample collected with metal sampler with lead weight.

Remarks 2. Well not bailed.

PARAMETER	RESULTS	UNITS	REMARKS
BODs	13	mg/l	
COD	129	mg/1	•
Suspended Solids (NFS)	122	mg/l	<i>i</i>
NH3 as N	1.2	mg/1 .\	
NO3+NO2 as N	0.3	mg/1 /	\
Total P	<b>∠</b> 0.02	mg/l	7
TDS	417	mg/l	•
TOC	. 31	mg/l	•
CN-, Total	<b>∢</b> 0.02		distilled 6-14-79
·			analyzed 9-12-79
рH	7,4	Units	field
Specific Cond.	740 .	· - · · · · · · · · · · · · ·	field
		25° C	
Total Alkalinity	220	mg/1	field
Fluoride	0.05	mg/l	
Chloride	67	mg/l	
Sulfate	70	mg/l	
Total Hardness	3 <b>4</b> 0	mg/1	
Total Sulfide	<b>₹</b> 0¦1	mg/l	•
Cadmium, dissolved	<b>4</b> 1	ug/l	•
Chromium, dissolved	<b>₫</b> 2	ug/1	
Copper, dissolved	3	ug/1	
Iron, dissolved	<b>د</b> 10	ug/l	•
Lead, dissolved	5	ug/l	
Manganese, dissolved	690	ug/l	
Mercury, dissolved	411	ug/l	•
Nickel, dissolved	410	ug/l	
Zinc, dissolved	21	mg/l	
Potassium, dissolved	5.76	mg/l	
Sodium, dissolved	31 6	mg/l	
Calcium, dissolved	50 4	mg/l	
Magnesium, dissolved	33 0	mg/l	
Arsenic, dissolved	44	ug/1	•
Silver, dissolved	<b>₹</b> 1	ug/l	

Joseph P. Teasdale Governor Fred A. Latser Director

Page Two Robert Robinson, Director Solid Waste Management Program Sample No. 79-2636 November 15, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of <u>Standard Methods for the Examination of Water and Wastewater</u>, EPA manual of <u>Methods for Chemical Analysis of Water and Wastes</u>, and/or <u>Annual Book of ASTM Standards</u>.

James H. Long, Director Laboratory Services Program Division of Environmental Quality



#### LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

NOV 2 1 1979

SAMPLE NO.

79-2635

SCLID MASTE HAHAGIHENT PROGRAM

	Reported to Robert Rob	inson Director	Dat	e11-15-79
•	Affiliation Solid Wast			
	Sample Description West	<sub>1</sub>	- · ·	<del></del>
SS <del>2</del>				
兴 55	Collected by Keith Scha	7.		
$\mathcal{O}_{\mathbf{z}}$	Affiliation Water Qual	ity Monitoring Se	ction - Lab S	ervices
₩.	Note: 1. Sampl Remarks 2. Well	e collected with not balled comple	metal sampler telv	with lead weight
₹₹	*			
МΘ	***	· ] V \		2011 270
й.	PARAMETER	RESULTS \	UNITS	REMARKS
≃8	BOD <sub>5</sub>	3	mg/l	
٦ [5	COD	119	\mg/1	
₹ 5	Suspended Solids (NFS) NH <sub>3</sub> as N	123 <b>(</b> 0]1	mg/1	••
<b>≥</b> ₽	NO3+NO2 as N	0.13	mg/1 mg/↓	
	Total P	<b>∢</b> 0.02	mg/1	
<del> </del> ≥ ∑	TDS	833	mg/1 \	
<u>&lt;</u> ≥	TOC	20	mg/1	
<b>∠</b> ö	CN-, Total	<b>∢</b> 0.02		distilled 6-14-79
щ 5	рН .	7.4		analyzed 9-12-79 field
O ž	Specific Cond.	1400		field
. ¥	•		25° C	
5,	Total Alkalinity	550		field
	Pluoride	0.02	mg/1	
₹≱	Chloride Sulfate	60 136	mg/1 mg/1	
	Total Hardness	720	mg/l	٠,
<b>~</b> ₫	Total Sulfide	ζσ. 1	mg/l	
A liss	Cadmium, dissolved	6	ug/l	•
<u>7</u> 5	Chromium, dissolved	2	ug/l	
Ж×	Copper, dissolved Iron, dissolved	<b>∢</b> 20	ug/l ug/l	•
$\square  lpha$	Lead, dissolved	14	ug/1	• 0
$\overline{\sim}$	Manganese, dissolved	1.4	ug/1	
<b>≒</b> °	Mercury, dissolved	<b>∢.</b>  1	ug/l	•
$\prec _{st} _{st}$	Nickel, dissolved	10	ug/l	
$\mathcal{Q}_{\overline{z}}$	Zinc, dissolved	118 7 97	mg/l	
MISSOURI DEPARTMENT OF NATURAL RESOURCES P.O. Box 1368 2010 Missouri Blvd. Jefferson City, Missouri 65102 (314) 751-3241	Potassium, dissolved Sodium, dissolved	7.87 31.7	mg/l mg/l	
₩ď	Calcium, dissolved	17/2	mg/l	
≥ ₹	Magnesium, dissolved	44.8	mg/l	
	Arsenic, dissolved	4	ug/l	

Joseph P. Teasdale Governor Fred A. Lafser Director

Silver, dissolved

Division of Environmental Quality James P. Odendahl Director

ug/1

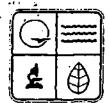
Page Two
Robert Robinson, Director
Solid Waste Management Program
Sample No. 79-2635
November 15, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of <u>Standard Methods for the Examination of Water and-Wastewater</u>, EPA manual of <u>Methods for Chemical Analysis of Water and Wastes</u>, and/or <u>Annual Book of ASTM Standards</u>.

James H. Long, Director

Laboratory Services Program

Division of Environmental Quality



DEPARTMENT OF NATURAL RESOU! 2010 Missouri 65102 (314) 7

## LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

NOV 2 1 1979

SAMPLE NO.

79-2638

COLLD WASTE CAMAGINERY PROGRAM

Reported to Robert Robinson, Director Date 11-15-79

Affiliation Solid Waste Management Brogram

Sample Description West Lake Landfill - Test Well #37A

Collected by Keith Schardein, Supervisor Date 6-13-79 1545

Affiliation Water Quality Monitoring Section - Lab Services

Remarks Note: 1. Sample collected with metal sampler with lead weight.

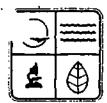
,			4.4	
PARAMETER	RESULTS	UNITS	REMARKS	
BODS	3.	mg/l		
COD	58	mg/l		
Suspended Solids (NFS)	374	mg/l		
NH3 as N	0.2	mg/1		
NO3+NO2 as N	0.1	mg/l		
Total P	40.02	mg/1		
TDS	474	/ mg/1		
TOC	26	mg/1		
CN-, Total	€0.02	mg/l	distilled 6-14-79	
,			analyzed 9-12-79	
рН	7.5	Units	field	
Specific Cond.	<b>840</b>	mmho/cm	field	
		25° C		
Total Alkalinity	268	mg/l	field	
Fluoride	0.06	mg/1	•	
Chloride	73 ·	mg/l		
Sulfate	66	mg/l		٠,
Total Hardness	360	. mg/l		
Total Sulfide	∢0.1	mg/l		
Cadmium, dissolved	<b>41</b>	ug/1	•	
Chromium, dissolved	6	· ug/1 -		
Copper, dissolved	8 :	ug/I		
Iron, dissolved	₹20	ug/1	•	٠,
Lead, dissolved	6	ug/l		
Manganese, dissolved	1490 .	ug/l		
Mercury, dissolved	.2	ug/l		
Nickel, dissolved	<b>∢</b> [10	ug/l		
Zinc, dissolved	30	mg/l		
Potassium, dissolved	5.50	. mg/1		
Sodium, dissolved	29 .2	mg/l	, •	
Calcium, dissolved	841.5	mg/l		
Magnesium, dissolved	23  5	mg/1		
Arsenic, dissolved	44	ug/l		
Silver, dissolved	41	ug/1		
		•		

Joseph P. Teasdale Governor Fred A. Lafser Director

Page Two Robert Robinson, Director Solid Waste Management Program Sample No. 79-2638 November 15, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of Standard Methods for the Examination of Water and Wastewater, EPA manual of Methods for Chemical Analysis of Water and Wastes, and/or Annual Book of ASTM Standards.

James H. Long, Director
Laboratory Services Program
Division of Environmental Quality



MISSOURI DEPARTMENT OF NATURAL RESOURCES 20. Box 1368 2010 Missouri Blvd. Jefferson City, Missouri 65102 (314) 751-3241

LABORATORY SERVICES PROGRAM REPORT OF SAMPLE ANALYSIS

PECE YED

SAMPLE NO.

79-2639

NOV 2 1 1979

Reported to Robert Robinson. Director RANDECENTERINGM

Affiliation Solid Waste Management Program

Sample Description West Lake Landfill - Test Well #37

Collected by Keith Schardein, Supervisor Date 6-14-79 0820

Affiliation Water Quality Monitoring Section - Lab Services Note: 1. Sample collected with metal sampler with lead weight. Remarks 2. Well not bailed prior to sampling.

**PARAMETER** RESULTS <u>UNITS</u> REMARKS COD 22 mg/10.1 NH3 as N mg/l NO3+NO2 as N 0.5 mg/l Total P 0.07 ing/1 TDS no sample 28 TOC mg/17.4 Нσ Units field 1680 Specific Cond. mmho/cm field 25° C Total Alkalinity 540 mg/l field Fluoride .05 mg/1 Chloride 13 mg/l Sulfate 415 mg/l Total Hardness 960 mg/1Cadmium, dissolved ۷1 ug/l Chromium, dissolved **<** 2 ug/1 15 Copper, dissolved ug/l Iron, dissolved 20 ug/l Lead, dissolved ug/l 300 Manganese, dissolved ug/l ₹10 Nickel, dissolved ug/1 1020 Zinc, dissolved ug/l 4.09 Potassium, dissolved mg/1 Sodium, dissolved 6.32 mg/l 258 Calcium, dissolved mg/l Magnesium, dissolved 71.2 mg/l Arsenic, dissolved 44 ug/l Silver, dissolved <1 ug/1

Joseph P. Teasdale Governor Fred A. Lafser Director

Page Two Robert Robinson, Director Solid Waste Management Program Sample No. 79-2639 November 15, 1979

The analysis of this sample was performed in accordance with procedures as outlined in the latest edition of Standard Methods for the Examination of Water and Wastewater, EPA manual of Methods for Chemical Analysis of Water and Wastes, and/or Annual Book of ASTM Standards.

James H. Long, Director
Laboratory Services Program
Division of Environmental Quality

FLAGSTONE
FLAGSTONE
RUBBLE
CRUSHED STONE
(ANY SIZE)
SCREENINGS
LIMESTONE
RIP RAP
SAND
ASPHALT

### West Lake Quarry & Material Co.

St. Charles Rock Road W. of Taussig
St. Louis County, Mo.
MAILING ADDRESS:
13570 ST. CHARLES ROCK ROAD
BRIDGETON, MO.
63044

July 23, 1979

Missouri Department of Natural Resources
Division of Environmental Quality
P.O. Box 1368
Jefferson City, Missouri 65102

Attn: Robert M. Robinson PE
Director
Solid Waste Management Program

#### Gentlemen:

Shown are approximate locations of monitoring wells on completed landfill also the latest analysis.

I apologize for taking so long.

Sincerely,

WEST LAKE QUARRY & MATERIAL CO.

Bill Canney

BC:dg

JIIL 25 1979



### REPORT OF ANALYSIS

SUBMITTED BY: Mr. William Canney West Lake Quarry Rt. 1, Box 296 Bridgeton, MO 63042

DATE: July 3, 1979 PROJECT NO. 1536-019 P.O.

DATE RECEIVED: June 6, 1979

SAMPLE ANALYZED: Nine Water Sample's

METHODS USED: Standard Methods, 14th Edition

### RESULTS:

Sample	pH <u>Units</u>	Conductivity (micromhos/cm)	Chloride (mg/l)	COD (mg/l)	Iron
35	6.3	1,250	96	150	7.41
37A	6.1	1,450	84	86	8.51
V 37	6.5	750	44	160	110
38	6.9	1,250	52	150	8.09
39	6.3	1,300	66	200	9.85
404	6.6	1,100	76	220	5.62
41×	6.8	710	85	420	9.56
34 🗡	6.5	1,650	74	270	6.06
36	6.4	1,200	31	370	41.8

JUL 25 1979

ENVIRODYNE ENGINEERS